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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,754	09/23/2003	Scott R. Culler	59039US002	1788
32692	7590	06/06/2006		
3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427				
			EXAMINER MARCHESCHI, MICHAEL A	
			ART UNIT	PAPER NUMBER

1755

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/668,754

Applicant(s)

CULLER ET AL.

Examiner

Michael A. Marcheschi

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 18 May 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: 1-14 and 16-57.
Claim(s) withdrawn from consideration: 15.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____.
13. ☐ Other: _____.

Michael A Marcheschi
Primary Examiner
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Continuation of 5. Applicant's reply has overcome the following rejection(s): (1) drawing objections, (2) rejection of claims based on enablement, and (3) rejection of claims based on new matter..

ATTACHMENT TO ADVISORY ACTION

The new matter added to the specification is the description of figure 1, as amended on page 4, line 10, to read “Figure 1 is a cross section view, enlarged of a **structured abrasive article**” because the specification, as originally filed, clearly defined Figure 1 as an article embodiment of the **instant** invention . In addition, page 5, lines 19-20 and page 14, line 5-6 (which describe **this figure** in detail) sets forth that “it is also within the scope of the (**instant**) invention”, **thus this clearly implies that figure 1 is intended to be an embodiment of the instant invention.** The above amendment to figure 1, which changes the figure description to not literally include the invention is thus new matter because the **original** specification clearly defined that this figure in an embodiment of the instant invention and applicants have not provide clear basis for this change. Applicants have not addressed the examiners comments with respect to teachings on page 5, lines 19-20 and page 14, line 5-6 which describe **this figure** in detail and set forth that “it is also within the scope of the (**instant**) invention...” which **clearly implies that figure 1 is intended to be an embodiment of the instant invention.** The above amendment to on page 4, line 10 is contradicted with the description on page 5, lines 19-20 and page 14, line 5-6. In view of this and since applicants have not commented on the teachings on page 5, lines 19-20 and page 14, line 5-6, the instant specification does not clearly define that figure 1 is not part of the claimed invention. Although this is a new matter rejection, the amendment to the specification has been entered. Applicants argue that figure 1 is not within the scope of the claimed invention (pending claims). Notwithstanding applicants arguments, the description on page 5, lines 19-20 and page 14, line 5-6 which describe **this figure** in detail, still imply that it is within the scope of the claims. Applicant amendment on page 4 and the

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description on page 5 and 14, defined above, as well as the original disclosure of what figure 1 teaches (i.e. embodiment of this invention) clearly presents confusion to the record and thus this confusion must be clearly addressed and eliminated. If this was in error, applicants are requested to (1) correct the above pages, (2) eliminate figure 1 and (3) eliminate any description thereof from the application, in order to clearly eliminate any confusion.

Applicants argue that Pieper et al, does not anticipate the claims since Figs. 8, 9, and 17 disclose only one sawtooth shape which is co-linear to a third side. This is not persuasive for the reasons below. Applicants also argue the requirement of 35 U.S.C. 102 that each and every limitations of the claimed invention be disclosed in a single reference. The examiner is aware of this requirement and the reference discloses all the limitations, as defined in the previous office action. Applicants also state that the instant claims recite that the distal end, when projected on a plane, is not co-linear to the third side (applicant defines "co-linear" as not forming a 90 degrees angle). To address applicants remarks, Fig. 9 of Pieper et al. does not clearly show a distal linear region forming a plane orthogonal to the third base and it could be argued that it is at an angle less than 90 degrees. Applicants have not clearly shown that the angle is a perfect 90 degree angle and how applicants came to this conclusion. Are applicants stating that the angle is a perfect 90 degrees? If so, where is this defined? Even if the reference angle is 89.9 degrees it would read on the claimed invention. In addition, this is also not persuasive because, as defined in the rejection, , a saw tooth shape does not necessarily mean a distal region orthogonal to the base, as evident by secondary references. The anticipation rejection is not solely based on the figures, rather on the disclosure, as a whole. Pieper et al. discloses (in describing the figures a

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"sawtooth" shape) and the broad description encompasses sawtooth shapes as disclosed in Figs. 8, 9, and 17 (as argued by the Applicant), as well as (and/or) sawtooth shapes as argued by the Examiner and presented by the evidentiary references above. The evidentiary references are not used as teaching an element lacking from Pieper but rather to support the Examiner's position in arguing that "sawtooth" shape as disclosed by Piper et al. does include sawtooth shapes as argued by the Examiner. It appears that applicants arguments are based on Pieper as only teaching one sawtoothed shape, however, as clearly defined above, applicants have not clearly shown that this sawtooth shape is orthogonal to the base (outside the scope of the claims) and evidence supporting that this is the only sawtooth shape that can be envisioned by this reference. In view of this, the argument that Pieper et al. does not disclose the shape as recited is not persuasive.

With regards to the argument that a 2x2 array is not disclose for the sawtooth shape, and it is only disclosed for the pyramidal composite, it is noted that not every possible embodiments disclosed by a reference must be shown in a figure. Piper et al discloses 2x2 array and discloses shapes like pyramidal or sawtooth. Further Pieper et al. discloses in column 8, lines 16-20 and column 8, lines 35-38 that the shape and periods or number of composites per unit area is varied depending upon the abrading applications. Fig. 18 also discloses at least two by two arrays. In view of this, the reference when taken as a whole, clearly teaches or suggests (reads on) a two-by-two array.

With respect 35 U.S.C. 103(a) rejection based on Pieper et al. (5,152,917) in view of Naujok (6,761,620) and Flood et al. (5,484,330), above, applicants do not present any clear arguments to rebut this rejection.

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With respect to the 35 U.S.C. 103(a) rejection based on Pieper et al. (5,152,917) in view of Kaisaki et al. (cited on IDS of 3/30/06) or Adefris et al. (cited on IDS of 3/30/06), applicants only argue that it is not understood how this (a taper) affects the teachings lacking in Pieper and that Pieper already teaches tapered composites (see figures 1-7, 12-14 and 18-19). Applicants argument about the above figures is for figures that are not sawtooth shaped and thus a taper is shown (i.e. pyramid shape). The examiners rejection was based on the fact that it would have been obvious to have a taper between the distal region and the base of the saw tooth composite of the primary reference because the secondary references teach benefits of such a taper, said benefits providing the necessary motivation for the combination, as applied. Even though a taper for a different shape is shown by the reference does not make the above combination unobvious. The combination, as defined, clearly address why the use of a non orthogonal position is obvious, the non orthogonal position be a result of a taper to distal region of the saw tooth shape.